

### Abstract

A mechanical face seal assembly comprises at least a single pair of seal rings (4, 5) whose opposed seal faces (9, 10) are held together in sealing engagement, one of the seal rings is non-rotatable while the other is provided for rotation in common with a rotary component (2). The two seal rings are formed of a SiC material to which a graphite component is added for at least one of the seal rings. The graphite component is provided in particulate form in a proportion of between 1.0 and 4.0 Vol % in a SiC matrix material comprising SiC crystals having a grain size of between 5 and 1500  $\mu\text{m}$ . The grain size of the graphite particles amounts to between 20 and 200  $\mu\text{m}$ .